III. Claims 5-6, drawn to the system for generating an electrochemiluminescent emission, classified in class 422, subclass 52.

IV. Claims 7-8, drawn to the kit for performing an electrochemiluminescent assay, classified in class 435, subclass 4 and subclass DIG 43.

V. Claims 9-12, drawn to the compound comprising an electrochemiluminescent label linked to a coreactant, classified in class 424, subclass 9.6.

Applicants provisionally elect, with traverse, the Group II claims, namely Claims 3-4 for prosecution on the merits.

Applicants further amend and cancel certain claims, as well as add new claims for consideration by the Examiner. Pursuant to 37 C.F.R. § 1.121, a clean set of pending claims is hereby provided below. A marked up version of the amended claim 9 is attached as Exhibit A.

IN THE CLAIMS

Please cancel claims 1, 2, 5, 6, 7, and 8 without prejudice.

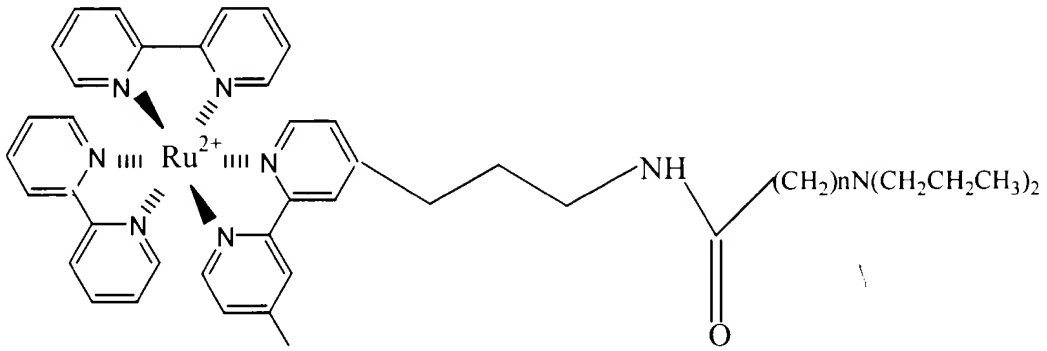
B1

3. A compound which comprises an electrochemiluminescent label linked to a coreactant, such that said compound emits electrochemiluminescence when exposed to electrochemical energy.

4. A compound which comprises an electrochemiluminescent label including a coordinate complex of a metal, which label is linked to an electrochemiluminescence coreactant, such that said compound emits electrochemiluminescence when exposed to electrochemical energy.

B2

9. The compound of claim 3 having the formula:



10. The compound of claim 3, further comprising a biomolecule.

11. The compound of claim 3, wherein the coreactant is not an analyte of interest.

12. The compound of claim 3, said electrochemiluminescent label is linked to said coreactant by a linkage which comprise one or more linking groups for attachment of biomolecules.

Please add the following new claims:

B3

13. (New) The compound of claim 3 or 4, wherein said coreactant is an amine.

14. (New) The compound of claim 3 or 4, wherein said coreactant is a tertiary amine.

15. (New) The compound of claim 3 or 4, wherein said coreactant comprises a dipropyl amine moiety.

16. (New) The compound of claim 3 or 4, wherein said coreactant is an N,N-dipropyl amino acid.

17. (New) The compound of claim 3 or 4, wherein said coreactant is NADH.

18. (New) The compound of claim 3 or 4, wherein said coreactant is the hydrolyzed form of a ß-lactam antibiotic having a hydrolyzed ß-lactam bond.

Cont
B3

19. (New) The compound of claim 3 or 4, wherein said electrochemiluminescent label comprises ruthenium, osmium or rhenium.

20. (New) The compound of claim 3 or 4, wherein said electrochemiluminescent label and said coreactant are linked by an amide bond.

21. (New) The compound of claim 3 or 4, wherein said coreactant is a strong oxidant, a strong reductant, a moiety that upon oxidation forms a strong reductant, or a moiety that upon reduction forms a strong oxidant.

22. (New) The compound of claim 3 or 4, wherein said coreactant is a species capable of interacting with said electrochemiluminescent label to produce electrochemiluminescence or wherein said coreactant is a precursor species which upon exposure to electrochemical energy is transformed into is a species capable of interacting with said electrochemiluminescent label to produce electrochemiluminescence.

23. (New) A method of generating an electrochemiluminescent emission, which comprises exposing the compound of claim 3 or 4, to conditions suitable for inducing electrochemiluminescence.

24. (New) A system for generating an electrochemiluminescent emission, which comprises:

(a) the compound of claim 3 or 4;

(b) an electrode for exposing said compound to electrochemical energy; and

(c) a light detector for detecting or measuring luminescence emitted from said compound for a composition containing same.